

Restaurants “have an important role to play in creating a food marketing environment that supports, rather than undermines, the efforts of parents and other caregivers to encourage healthy eating among children and prevent obesity,”<sup>1</sup> according to the White House Task Force on Childhood Obesity.

The harmful effects of food marketing on child and adolescent health have been discussed widely in recent years. In 2006 the Institute of Medicine (IOM) released a report about children’s food marketing beginning with two words, “marketing works.”<sup>2</sup> In the same year, the World Health Organization (WHO) issued a report, noting that “...exposure to the commercial promotion of energy-dense, micronutrient-poor foods and beverages can adversely affect children’s nutritional status.”<sup>3</sup> Both the IOM and WHO reports highlighted the dire state of children’s food marketing and called for sweeping changes. These reports called into question the assertion by food industry proponents that food marketing to children only affects brand preferences (e.g., purchases at McDonald’s instead of Burger King) and does not increase total purchases of food categories such as fast food.<sup>4</sup> However, they left open the possibility that food companies might be persuaded by good will, public pressure, or the threat of government regulation to change their marketing practices.

Much has transpired since the release of the WHO and IOM reports. In the fast food industry, two of the largest fast food advertisers (McDonald’s and Burger King) have joined the Children’s Food and Beverage Advertising Initiative (CFBAI) and pledged to advertise only “better-for-you” choices to children;<sup>5</sup> the majority of restaurants have introduced more nutritious options to their menus for both children and adults;<sup>6</sup> and most fast food restaurants will soon be required by federal law to post calories for all items on their menu boards.<sup>7</sup> The critical question is whether industry promises will reverse the unhealthy defaults that exist in the current fast food marketing environment.<sup>8</sup>

Consumption of fast food is associated with a number of negative health consequences, most notably unhealthy diet that increases risk for obesity.<sup>9-10</sup> Fast food restaurants spend more than \$660 million each year to market their products and brands to children and adolescents.<sup>11</sup> This report describes what is being marketed by these restaurants, who they are targeting and how they reach them, and what happens when young people visit fast food restaurants.

## Aims and context

In 2008, the Rudd Center for Food Policy and Obesity at Yale University received a grant from the Robert Wood Johnson Foundation to study the amount and impact of food marketing directed at children and youth. The goal was to highlight both helpful and harmful industry practices by conducting objective,

science-based evaluations of the marketing conducted by specific companies within different food categories, as well as the nutritional quality of the food products promoted. In 2009, we published the Cereal FACTS report that provided a comprehensive review of cereal marketing targeted to children and adolescents ([www.CerealFacts.org](http://www.CerealFacts.org)). We now focus on the fast food industry.

Fast Food FACTS quantifies the nutritional quality of fast food restaurant menus and documents the full array of marketing practices used to promote these restaurants and their products to children and adolescents. The data presented in this report provide a means to evaluate current marketing practices and their impact, and offer a metric against which future changes can be monitored. We incorporate the same media measurement data used by advertisers to quantify exposure to TV, radio, and digital marketing. We also include market research data used to monitor competitors’ product sales. In addition, we conducted our own quantitative and qualitative research to measure menu item nutritional quality; the messages and products presented in TV, internet and other forms of digital marketing; in-store marketing practices; and parent attitudes about fast food restaurants. When possible, we evaluated differences by target populations, focusing on children, adolescents, and African American and Hispanic youth. Although this analysis is the most extensive of its type ever undertaken, we could not evaluate every fast food restaurant. Therefore, we focused our data collection on twelve fast food restaurants, including the ten largest sellers and/or marketers of fast food to young people.

## Why fast food?

During the last several decades, food patterns have shifted in the United States with Americans consuming a greater proportion of their total calories outside the home.<sup>12-13</sup> In 1994-96, 10% of young people’s caloric intake came from fast food, a five-fold increase compared to twenty years earlier.<sup>14</sup> Data from the mid-1990s also showed that one third of young people (4-19 years) ate fast food every day.<sup>15</sup> Portion sizes offered by fast food restaurants also grew during this time period, with individual items from two to five times larger than they were when originally introduced.<sup>16</sup> More recent data from 2003-04 indicate that fast food now contributes 16% to 17% of adolescents’ total caloric intake,<sup>17</sup> and each meal consumed in a fast food or other restaurant increases adolescents’ daily intake by 108 calories.<sup>18</sup>

Given the considerable role fast food plays in young people’s diets, the nutritional quality of menu items offered in fast food restaurants is a critical concern. A recent study of the nutrient quality of children’s meals available at fast food restaurants found that only 3% met the nutrition standards set by the National School Lunch Program for foods served to children eight years of age and younger.<sup>19</sup> That study also found that less than one-third of these meals provided adequate calcium or iron and more than half exceeded recommended sodium

levels. Additionally, restaurants encourage over-consumption of these nutrient-poor foods by promoting combination meals that offer price savings for larger portion sizes and in-store signs that encourage unhealthy eating and overeating.<sup>20</sup>

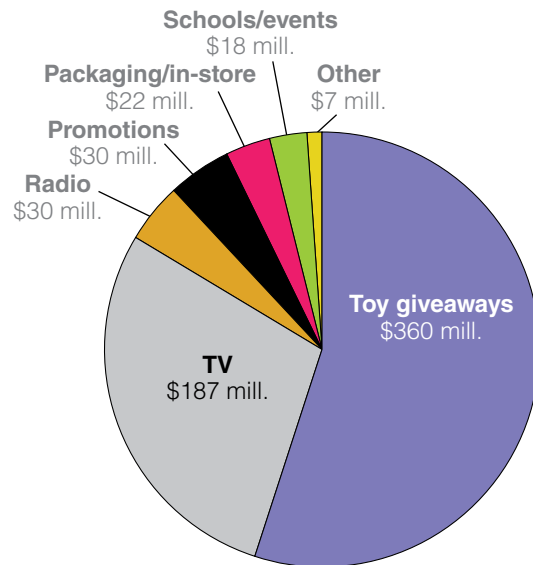
There is reason to be concerned about the impact of fast food consumption on young people's overall nutrition and health. Young people who eat fast food consume more total fat, added sugars, and sugar-sweetened beverages, and less fiber, milk, and fruits and vegetables compared to children who do not eat fast food.<sup>21-23</sup> Greater consumption of fast food is also associated with higher energy intake overall and greater risk of future obesity.<sup>24-26</sup> Adults who visit fast food restaurants and reside in neighborhoods with a high density of fast food restaurants and low walkability have increased blood pressure over time.<sup>27</sup> Furthermore, African American youth, a population that faces some of the highest risks of obesity and obesity-related diseases, consume more fast food compared to white children of the same age.<sup>28, 29</sup>

### Marketing to young people

In light of increased consumption of fast food by young people and its negative influence on their diet and health, public health advocates and government officials have expressed concern about marketing that encourages young people to consume fast food. In 2006, fast food restaurants spent approximately \$300 million in marketing specifically designed to reach young people, more than any food category except for carbonated beverages.<sup>30</sup> Fast food restaurants spent as much as marketers of juices, non-carbonated beverages and snack foods combined, and nearly two and a half times the amount spent for candy and frozen desserts. In addition, fast food marketers spent an estimated \$360 million on toys distributed as premiums with children's meals. When added to their other marketing expenditures, spending on fast food marketing programs targeted to children and teens totaled \$660 million. This amount is more than 200 times the \$3 million communications budget for the "5 A Day" campaign, a joint venture with the National Cancer Institute (NCI) and the food industry, to encourage fruit and vegetable consumption.<sup>31</sup>

Approximately two-thirds of fast food marketing budgets was spent on traditional TV and radio advertising.<sup>32</sup> In 2007, fast food advertising comprised 22% of TV food ads viewed by children (ages 6 to 11 years) and 28% of those viewed by adolescents.<sup>33</sup> Children and adolescents viewed more ads for fast foods than for any other food category. The average U.S. child viewed 1,058 TV ads for fast food annually, or 2.9 ads every day, and adolescents viewed even more: almost 1,500 per year, or 4.1 per day. These marketing efforts begin as early as preschool: 66% of child-targeted advertising during preschool programming promoted fast food restaurants.<sup>34</sup> Fast food companies also spent considerable sums on youth-targeted radio advertising; cross-promotions, and other ties with philanthropies and athletic sponsorships; product

packaging and in-store marketing; and in-school and events marketing (see **Figure 1**).<sup>35</sup> Fast food brands also commonly use digital marketing techniques, including social media, in-game marketing, and viral media to increase the appeal of their products to young people.<sup>36</sup>



**Figure 1:** Spending by fast food restaurants on marketing directly targeted to children and adolescents

There is considerable evidence that exposure to marketing for fast food is even higher among African American and Hispanic youth.<sup>38</sup> African American youth view almost 50% more TV advertisements for fast food than do white children and adolescents.<sup>39</sup> Although differences in advertising exposure can be attributed in large part to the greater amount of time that African American and Hispanic youth spend watching television,<sup>40</sup> fast food restaurants appear to disproportionately target African Americans and Hispanics with their marketing efforts. For example, fast food ads appear more frequently during African American-targeted TV programming than during general audience programming.<sup>41</sup> Fast food advertisements are also prevalent on Spanish-language television networks, comprising nearly half of all ads.<sup>42</sup> Billboards for fast food restaurants appear significantly more often in low-income African American and Latino neighborhoods.<sup>43</sup> Fast food restaurants located in poorer African American neighborhoods also promote less-healthy foods and have more in-store advertisements compared to restaurants in more affluent, predominantly white neighborhoods.<sup>44</sup>

The 2010 report by the White House Task Force on Childhood Obesity explicitly addresses the potentially harmful effects of fast food marketing, noting the frequency with which children eat at fast food restaurants and calling on restaurants to "consider their portion sizes, improve children's menus, and make healthy options the default choice whenever possible."<sup>45</sup>

## Recent restaurant industry initiatives to address childhood obesity

The restaurant industry has responded to concerns about the nutritional quality of their products and the volume of marketing targeted to young people. According to the National Restaurant Association, “two-thirds of quickserve operators offer more healthful choices for children than they did two years ago,”<sup>46</sup> and McDonald’s says that, “any fair and objective review of our menu and the actions we’ve taken will demonstrate we’ve been responsible, we’re committed to children’s well-being, and we’ll continue to do more.”<sup>47</sup> The two largest fast food marketers to children, McDonald’s and Burger King, joined the Children’s Food and Beverage Initiative (CFBAI), an industry-sponsored program to “change the landscape of child-directed advertising.”<sup>48</sup> As members of the CFBAI, these two restaurants have pledged to depict only “pledge-approved, better-for-you” products in their child-directed measured media (i.e., television, radio, third-party internet and print), company-owned websites and interactive games. These pledges were fully implemented by the beginning of 2009.

While the CFBAI represents an industry-led effort to reduce unhealthy marketing to children, numerous omissions and loopholes raise questions about the fast food industry’s commitment to change the landscape of children’s food advertising. For example, only McDonald’s and Burger King had joined the initiative as of September 2010.<sup>49</sup> These two restaurants are the largest advertisers to children on television. However, other restaurants contribute more than half of the fast food ads children view.<sup>50</sup> Notably, Subway and YUM! Brands, whose restaurants include KFC, Taco Bell, and Pizza Hut, had not joined the CFBAI at the time of this report’s publication. So in spite of reductions in children’s exposure to McDonald’s and Burger King advertising on television, children’s exposure to all fast food TV advertising increased by 12% from 2003 to 2007.<sup>51</sup> This increase occurred at the same time that children’s exposure to TV advertising for other product categories (including beverages, cereal, candy, and snacks) decreased.

Another significant limitation of the CFBAI is that it only addresses advertising to children younger than age 12. As discussed, adolescents view 40% more television advertising for fast food than children do,<sup>52</sup> and many young people of this age have the means to visit these restaurants on their own. A survey of middle and high school students found that 77% of boys and 72% of girls reported visiting a fast food restaurant in the past week,<sup>53</sup> and a more recent study indicated that 59% of adolescents (12-19 years) consumed fast food on at least one of the two previous days.<sup>54</sup>

Finally, the CFBAI does not address all forms of marketing to young people. For example, fast food restaurants spent \$22 million on packaging and other marketing in the restaurant targeted to young people, as well as \$9 million on marketing in schools. However, neither of these forms of marketing is

covered by the CFBAI. The initiative also does not include the 91% of fast food restaurants’ spending on philanthropic marketing programs (more than \$10 million) which was reported as youth-targeted marketing expenditures. Similarly, the CFBAI does not address marketing programs that disproportionately appeal to young people if they are not the primary target audience. Examples include TV advertising on general audience programming with wide youth appeal, such as “American Idol” or “Glee,” and branded games on company websites (known as advergames).

These limitations to the CFBAI and other fast food industry actions have led public health advocates to question whether restaurant industry initiatives are intended to improve public health or merely deflect concerns about their products and marketing efforts. For example, McDonald’s pledged to market only apple dippers and 1% low-fat white milk in their Happy Meal advertisements targeted to children. However, a recent examination by the Center for Science in the Public Interest found that 93% of the time shoppers were automatically given french fries when ordering a Happy Meal.<sup>55</sup> In addition, the National Restaurant Association lobbied extensively against a recent bill passed in Santa Clara County, California that requires fast food kids’ meals that come with a toy to meet minimum nutrition standards.

Meanwhile, purchases of unhealthy options continue to be the norm at fast food restaurants. During 2008-2009, only 5% of children ordered fruit and 14% ordered plain milk or 100% juice at fast food restaurants.<sup>56</sup> Additionally, from 2005 to 2008, the ordering of kids’ meals by children (under 13 years) declined by 11% while orders of typically higher-calorie items from dollar or value menus increased by 9%, according to The NPD Group (NPD), a market research firm that tracks product purchases at restaurants by age group.<sup>57</sup> Snack food purchases also increased during the same period. “Kids today want more choices and sophisticated fare,” said an NPD spokesperson.

Given the damaging effects of fast food on young people’s health, it is imperative that young people consume less of the calorie-dense nutrient-poor foods served at fast food restaurants. The food industry has pledged to offer healthier options for consumers who choose them and to improve their marketing practices targeted to children. They must also curb marketing practices that aggressively promote less healthful products to all young people and implement practices inside restaurants to encourage purchases of the more nutritious options on their menus.

## On creating a transparent, open, and objective process

This report addresses the need for comprehensive, reliable, and current information about fast food marketing practices and how these practices affect young people’s fast food purchases. It also examines the nutritional quality of current

fast food menus. The data presented in this report and our methods are described in detail. We use the best available syndicated marketing data and strategic studies to fill important gaps in knowledge. We developed the scope of the report and collected information for it based on detailed reviews of the literature and multiple discussions with experts in the field, including with the nutrition, marketing, and public health experts who serve on our advisory committee.

Despite our best efforts, we acknowledge that no piece of scientific work is perfect. We learned a great deal from developing the Cereal FACTS report and have incorporated feedback from that report to build upon and improve the research methods for Fast Food FACTS. In addition, we have revised the methods used to evaluate the nutritional quality of fast food menu items to take into account the complexity of the wide variety of menu items offered. We also developed new methods to evaluate forms of marketing used extensively by the fast food industry, including radio and social and mobile marketing. Finally, we incorporate data in this report to quantify and evaluate fast food purchases by and for young people.

Although we provide a thorough evaluation of fast food marketing to young people, it is not possible to quantify all

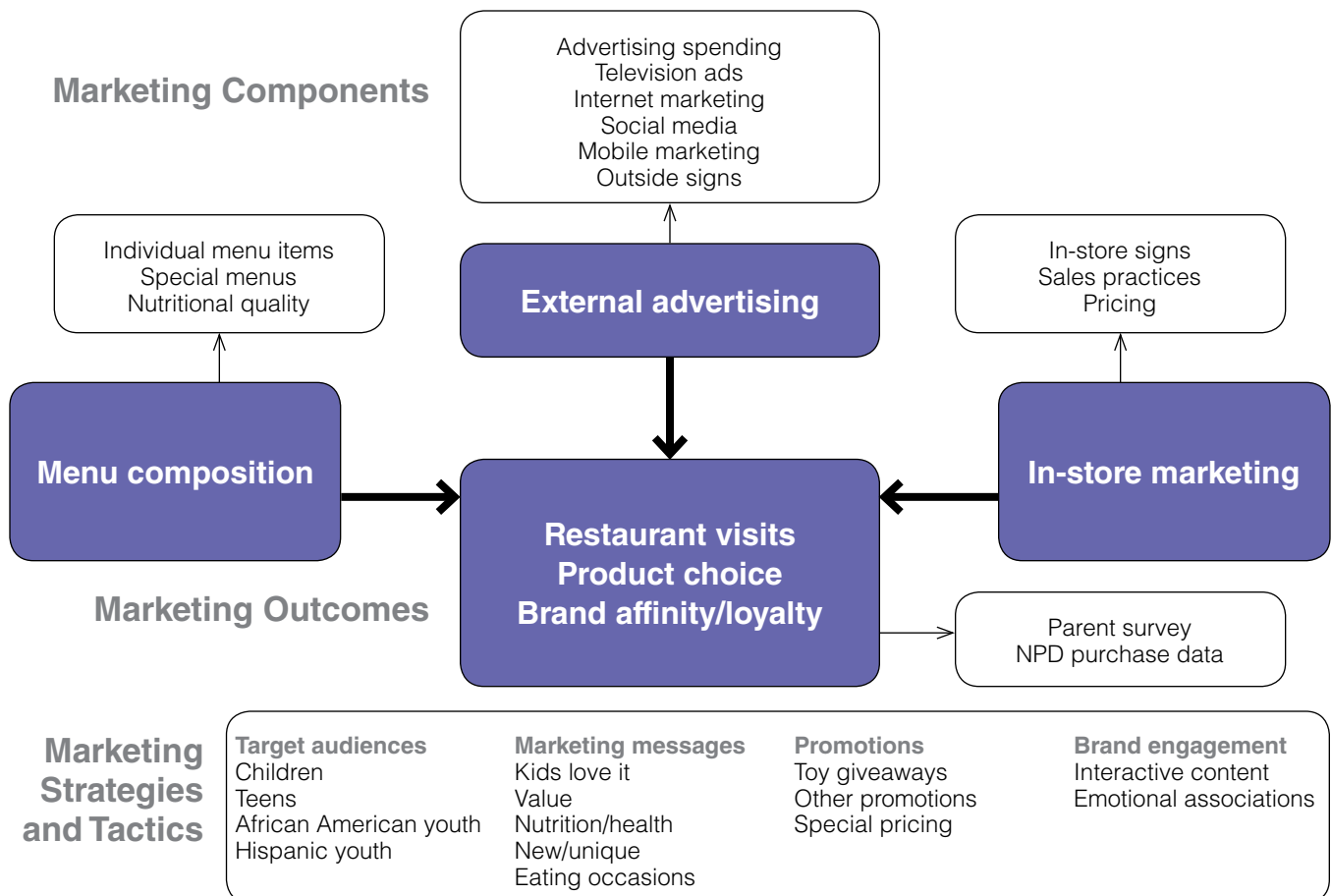
types of fast food marketing targeted to them and evaluate their impact. We invite further feedback from interested parties as we continue to refine our methods and update our data to make the information as valid and accurate as possible.

## Fast Food FACTS report

In this report, we examine three elements of fast food marketing plans: specific marketing programs used to promote fast food products, marketing strategies used in these programs, and the impact of these marketing efforts on customer attitudes and behaviors (see **Figure 2**). We focus our analysis on the twelve restaurants with the highest sales and advertising to youth.

We quantify three major **marketing components** used by fast food restaurants in their marketing plans: **menu composition**, or the food products offered for sale at the restaurants; **external advertising**, comprised of marketing practices such as TV advertising and internet marketing designed to *pull* customers into the restaurants; and **in-store marketing**, or advertising and promotion that occurs within the restaurant, including signs, pricing, and sales practices, to push sales of individual menu items.

**Figure 2.** Model of fast food marketing components, strategies, and outcomes



We also examine **marketing strategies** used across the different marketing components. These include **targeted marketing** practices that appeal to different age groups, including preschool children, elementary school-age children, and adolescents, as well as marketing practices that disproportionately reach or appeal to African American and Hispanic youth. These minority populations face higher risks of obesity and obesity-related diseases and, therefore, the nutritional quality of foods targeted to these groups warrant close attention.<sup>58 59</sup>

We assess the **messages** commonly used by fast food restaurants to communicate the benefits of their products, including “kids love it,” “good value,” “healthy” or “low-calorie,” “new” or “different,” and good for specific eating occasions (e.g., snack, breakfast, late-night). We also evaluate **promotional tactics** frequently used by fast food restaurants, including toy giveaways with kids’ meals, other tie-ins with entertainment companies and charities, and limited time offers for special pricing or food giveaways for specific menu items. In addition, we examine tactics that encourage **brand engagement**, or extended involvement with a restaurant brand, such as interactive content in internet and social media or tactics that encourage emotional associations with a restaurant.

Finally, we begin to quantify the **marketing outcomes** encouraged by these marketing practices. When fast food restaurants market their products, they not only encourage frequency of **restaurant visits**, they also influence consumers’ **product choices**, or the menu items ordered during those restaurant visits. Particularly in the case of marketing to young people, these marketing practices may also create **brand loyalty and affinity**, or long-term preferences and positive feelings about the restaurants.

## Research design

For each of the marketing components, we assess several specific marketing practices and strategies for the twelve restaurants in our analysis. When available, we also provide data for the fast food industry in total.

- **Menu composition** research provides nutrient content data on all regular items on restaurant menus as of January 15, 2010. We also characterize menu items by food category and special menus (i.e., kids’ meals, dollar/value menus, and healthy menus) and evaluate the nutritional quality of individual menu items. Finally, we compare nutritional quality of food categories and special menus by restaurant.
- **External advertising** research includes both quantitative and qualitative data to measure advertising practices that reach consumers outside of the restaurant. These practices include spending on advertising media, TV advertising,

internet marketing (including company-sponsored websites and advertising on third-party websites), social and viral media (including Facebook, Twitter, and YouTube), mobile marketing, and signs outside the restaurants. To quantify young people’s exposure to these different forms of advertising, we used syndicated data from The Nielsen Company (Nielsen), comScore Inc., and Arbitron Inc. When this information was not available, we commissioned or implemented our own studies to measure the extent that individual restaurants engage in these practices. In addition, we conducted content analyses of the different forms of marketing to assess the products, target audiences, messages, and techniques presented in the advertisements.

- **In-store marketing** research presents quantitative and qualitative data to assess marketing practices inside the restaurants that encourage sales of specific products. We present results of an audit of signs located within the restaurants and at drive-thru lanes; a study of restaurant sales practices that documents products encouraged at the point-of-sale when ordering kids’ meals and combo meals; and special pricing options promoted within the restaurants. We also conducted a content analysis of the products, target audiences, and other promotions presented on in-store signs.

To measure the **outcomes** of these practices, we purchased market research data from The NPD Group (NPD) that quantifies the types of food products purchased most often using their Consumer Reports on Eating Share Trends (CREST) data. We combined these numbers with our nutrient content data to evaluate the overall nutritional quality of products purchased by young people at the twelve restaurants in our analysis. We also conducted a survey of parents of 2- to 11-year-olds to understand how often they visit fast food restaurants with their children, what items they purchase for their children, and why.

This research is detailed in the following pages and organized into five sections:

- **Methods** details the data sources, procedures, and calculations used to collect and analyze the data;
- **Results** presents the detailed findings of each of these analyses;
- **Conclusion** summarizes the findings and discusses implications and recommendations for further improvements in fast food restaurant products and marketing practices;
- **Ranking Tables** compare the nutritional quality and marketing practices of different restaurants, and
- The **Appendices** provide the detailed data that are summarized in the Results.